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ABSTRACT

Examining the relationship between linguistic functions and other complex mental and emotional processes such as intellect, conceptual behavior, personality differences, egocentricity, and other important facets of cognitive and affective behavior may lead to the description of "psychologically" real grammatical structures which relate directly to mental processing, storage, and recall. Such a concept of English grammar with a cognitive basis according to a generative semantic theory of language would increase meaningful learning in English as a second language (ESL). According to generative semantic theory, the semantic organization is the base and forms the deep structure; the syntax emerges from the semantic base. From the beginning stages, language learning can and should be meaningful, with meaningful manipulation the goal of early ESL classes leading to communication and meaningful learning. Through communication the learner himself is better able to relate his new language to his own cognitive organization. (Author/VM)

THE PSYCHOLOGICAL REALITY OF "GRAMMAR" IN THE ESL CLASSROOM*

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Language teaching can be a very discouraging business at times: there appears to be no end to the number of linguistic and psychological controversies in second language acquisition, and the more we "know" about our field, the fewer actual solutions we seem to be able to offer for our problems. This is not by any means a result of a lack of hard work and sincerity on our part. We get the same feeling that Charlie Brown did in a recent Peanuts strip, as he walked dejectedly off the pitcher's mound, discouraged and exhausted: "Good grief!" he said, "18 $\frac{1}{2}$ to 0! I just don't understand it. How can we lose when we're so sincere?"

I don't think we are losing by such a margin in the language-teaching ball game, for however dimly we see through the looking glass today there is some progress in the present and hope for the future when we may indeed come face to face with optimal solutions to our language teaching predicaments. One path that is leading us closer to that solution is now being explored in recent attempts to go beyond purely "linguistic" considerations and to examine the relationship between linguistic functions and other complex mental and emotional processes such as intellect, conceptual behavior, personality differences, egocentricity, and other important facets of cognitive and affective, behavior.

In an earlier paper (Brown, 1972), I made some speculations about some of the ways in which this new direction of research could

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lead to more "meaningful" language classes in which learning and retention may be markedly improved. An important distinction was made between "rote" and "meaningful" learning: rote learning is a process of acquiring and storing items as relatively isolated entities, usually through a process of conditioning, that is, through repetition and practice, with the effect of relatively short-term retention as soon as interfering items enter cognitive structure; meaningful learning, in contrast, is a process of relating and anchoring new items into an established conceptual hierarchy--this process of "subsumption" is an efficient storage process which promotes retention by what I called "cognitive pruning" procedures. Both kinds of learning are evident in human behavior, but most of the concepts, ideas, and other items which are retained over a long term are a product of meaningful learning.

There are two important conditions that have to be met in order for meaningful learning to take place: (1) First, the learning task itself must be potentially meaningful to a learner, that is, items--ideas, concepts, materials--are themselves in some way relatable to the learner's structure of knowledge. (2) Second, the learner must have within him a "meaningful learning set", that is, a disposition to relate a new learning task to his existing cognitive organization.

There can be little argument that in the larger sense any language fulfills condition 1, in that languages are clearly of potential and actual meaning to human beings. What there is a great deal of argument over, however, is whether the units into which we classify language in the language classroom are indeed meaningful!

The second condition implies another question: what are the

crucial properties of a meaningful learning set, and to what degree can meaningful learning sets be acquired or learned or induced? And this question implies a theory of human behavior which must include many aspects of cognitive, affective, and psychomotor processes as they relate to language learning.

So, in the ESL classroom, in order to satisfy condition 1, the underlying character of the items of our lessons--the rules of the language and the particular samples of language we choose--must be potentially meaningful, that is, they must bear some relationship to the reality of the learner. And in order to satisfy condition 2, teachers need to create optimal conditions, through classroom techniques, whereby students can maintain maximal use of meaningful learning processes.

Focusing on the specific topic of grammar teaching in ESL, we can see that for some decades, if not longer, grammar has been a controversial topic in linguistics and language teaching. Arguments have ranged from the relative merits of transformational grammar in the language classroom to the virtues of inductive and deductive techniques, and even to the question of whether formal "grammar" has any place at all in foreign language learning. Russell Campbell, recently writing on the "state of the art" in grammar teaching, noted:

The ability of our students to speak and understand a foreign language must, in part, depend upon our ability as teachers to provide them with the opportunity to acquire native-speaker competence, that is, to provide them with the rules that will permit them to produce and interpret an infinite number of grammatical sentences they have never seen or heard in our classrooms or in the textbooks they use. (1970:37)

This is not a revolutionary statement; it simply recognizes that language is by its very nature rule-governed. But two important questions that must be answered about the statement are, first, what are the rules

of language (very little has been discovered about the rules by which we, in reality, operate), and second, what are the optimal means by which these rules can be acquired in second language learners? Thus the two basic conditions of meaningful learning serve to define two questions that we face as ESL teachers confronted with either a "grammar" class, or with teaching and integrating "grammar" into our daily lessons.

I

The first question, more specifically, is: with reference to ESL, is there a "meaningful" grammar (or, system of rules of the language) which we can identify and use? By "meaningful grammar" I am referring to a set of rules which is "psychologically real" in the sense that the rules themselves, as described, represent or at least approximate cognitive processes and categories through which humans operate. That is to say, grammatical structures are "psychologically real" if they describe or directly relate to mental processing, storage, and recall. For example, in transformational-generative (TG) grammar, we could ask: is a sentence in the passive voice indeed processed and stored in some kind of "active" form with a PASSIVE node attached? Or, does the number of transformations involved in deriving a particular surface structure correlate with the "complexity" of the sentence when compared with other sentences? So, for example, is the sentence:

(1) Bill doesn't have a home.
more "complex" cognitively than:

(2) Bill has a home.

If the negative transformation makes (1) more complex than (2), then we have to decide whether, cognitively, (1) is really any more complex than:

(3) Bill is homeless.

In this sense "grammatical complexity" may be very difficult to define.

Campbell admitted at the end of his article that "there are still substantial areas of English grammar that have not been fully understood and reduced to rules. And of the rules now available to us, many are controversial and incomplete." (1970:47) And by now we have become hardened to Chomsky's widely quoted statement at the 1966 N.E. Conference on the inapplicability of TG theory to language teaching (Chomsky, 1966). Actually, both the structural and the TG traditions seem to provide rather ill-conceived notions of "grammar." Structuralists give us detailed methods for analyzing surface features of languages but offer little insight into teaching the underlying structures of language which are obviously necessary, as Campbell pointed out, to produce creativity in second language acquisition. TG linguistics provides explicit formal systems accounting for the generative, creative nature of language but those systems are so far removed from reality that the language teacher is left confused and bewildered. Lewis recently noted: "Perhaps the theory of transformational grammar is antithetic to any known method, in that an orthodox, rigid set of procedures may stifle a student's creative powers....It is conceivable that a 'non-method' will have to be developed." (1972:9-10) But from the point of view of meaningful learning, one of the main problems with TG grammar is that the syntactic component is the base component of language, where semantic rules are "interpretive" rules, operating on the syntax. The criterion of "psychological reality" calls for a complete reversal of this notion, with the semantic or cognitive component as the base, at the deepest level of language. A meaningful theory of language must give grammar a cognitive base. In this perspective, it is easy to

see how TG grammar has "failed" in foreign language teaching.

A cognitive or semantic base--and thus a greater degree of psychological reality--is suggested by recent generative semantic theories of language. Case grammar seems to fall into this same category. Nilsen(1971) described some of the potential uses of case grammar in ESL, showing that it can lead to structurally-based ESL lessons that are at the same time situational and meaningful. Consider the following sentences:

- (4) The city is noisy.
- (5) The rush hour is noisy.
- (6) The motor is noisy.

To describe "the city," "the rush hour," and "the motor" all as subject noun-phrases is probably farther from reality than to differentiate the three by describing them, respectively, as a "locative," a "temporal," and an "instrument." Similarly, "John" and "Bill" in the following sentences:

- (7) John has a new car.
- (8) Bill ate the bananas.

have an "experiencer" and an "agent," respectively. Semantic organization is the base and thus forms the deep structure; syntax then emerges from this semantic base.

This of course does not mean that among traditional, structural, and TG grammars there have been no rules which are "real." For centuries English grammarians have spoken of the distinction between present perfect and past perfect tenses, quite "real" in the sense that human beings conceptualize many items not only in terms of chronological order but also with the present moment as a focal point of reference. The

grammatical description reflects this phenomenon. But, in contrast, if words like "might," "can," and "will" are called "auxiliaries" or "helping verbs" we may have wandered far from reality in that the cognitive categories of potentiality, capability, and futurity, are major categories by which we analyze and classify the world and ourselves. So if I say:

(9) He might be able to go to the game tonight.

in terms of cognitive reality I am speaking of [POTENTIALITY + CAPABILITY + FUTURITY + agent + locomotion + locative + time]. It would be hard to argue that what I "really" thought in my mind was something like [pronoun + auxiliary + verb of being + adjective + infinitive + prepositional phrase + adverb], or even [noun phrase + verb phrase].

With a semantically or cognitively based grammar, furthermore, such sentences as (10) through (14)--structurally diverse by some standards--could all be categorized as semantically similar:

(10) I saw a boy who had red hair.

(11) I saw a boy and he had red hair.

(12) I saw a red-headed boy.

(13) The boy I saw was a red-head.

(14) A red-headed boy was seen by me.

They all involve, in various permutations of categories, and in varying degrees of emphasis, [agent + visual perception + object + attribute].

In its ultimate form, then, a cognitive or meaningful approach to grammatical analysis could lead to a complete restructuring of our conception of grammar, which in turn, should result in more meaningful use of grammar in ESL.

II

This brings me to the second question, an equally, if not more crucial issue: the means or method by which grammar is to be taught in order to be optimally meaningful within the learner himself, to satisfy condition 2.

There is little value in raising the age-old debate over inductive versus deductive learning in a second language. It is hardly a question of "all or nothing;" some degree of both kinds of learning is clearly necessary. The important matter here is that neither kind of learning guarantees success. Both types of learning can lead to boredom and failure: our deductive explanations are often too long, abstract and unclear; our classroom discussions sometimes center about one small detail which interests only one or two students; or perhaps our carefully planned inductive drills lack that bit of zest that is needed to keep things lively and fresh. What emerges of crucial importance, then, is finding approaches in the classroom that make maximum appeal to meaningful learning sets within the learners. This appeal should be made on the basis of the total human organism, in the sense that cognitive, affective, and psychomotor processes are all involved. One of these domains that has been minimized for too long is the affective domain. Some recent research (Nelson and Jakobovits, 1970; La Forge, 1971; Begin, 1971) on language learning suggests that the combination of affectivity and cognition in what has been called "motivation" has almost everything to do with success in second language learning.

How can we bring about this optimal "blend" of variables so as to promote meaningful learning, and minimize rather inefficient rote processes in the ESL classroom? A stage of "manipulation" in foreign

language learning is probably indispensable, whether the "teacher" provides it or not. And I believe it is only an unfortunate set of circumstances that so much of this aspect of language learning has degenerated into rote situations. This tendency was illustrated recently in an amusing incident that occurred in Detroit: a school boy was asked to write down some sentences on a piece of paper, and he said "ain't got no pencil." Disapproving of the non-standard response, the teacher embarked on a barrage of model patterns for the child: "I don't have a pencil...You don't have a pencil...He doesn't have a pencil...etc." Bewildered by this intimidating onslaught of patterns, the child innocently replied, "ain't nobody got no pencils?"

We should also recognize that from the very beginning stages, language learning can and should be meaningful: in some way the distinctive items of a lesson must be related to existing cognitive structure, "subsumed" into an organized whole, or else they will be very easily forgotten. Reliance in ESL upon "memorization,"--if the term implies rote practicing of items until, through conditioning, and perhaps overlearning, certain words or patterns are "learned"--is strongly challenged by the concept of meaningful learning.

"Operant conditioning," as a rote process in human beings is severely limited with respect to foreign language learning; it can perhaps only be applied fruitfully to psychomotor, muscular coordination in the articulation process. Certainly the complexities of memory, recall, and linguistic encoding and decoding are well beyond conditioning paradigms.

So "meaningful" manipulation is perhaps the goal of early ESL classes, and with respect to "grammar" lessons--or any kind of lesson--this kind of goal begins with a communicative, empathetic teacher, a

receptive, emotionally committed student, and a positive rapport between teacher and student. Classroom activities themselves can take on meaning in a number of ways: (a) inductive drills and other exercises should point toward a specific grammatical goal which is clear to all students; (b) sentences should as much as possible relate to situations which are real to the student, and should progress from thought to related thought; (c) as much as possible one should allow reality and truth to be expressed by the student; and (d) allow the manipulative stage to continue only through the point of "muscular habituation," since this, along with inductive internalizing of rules, is the purpose of manipulative activities. These kinds of manipulative activities, if built upon psychologically real grammatical foundations, should fulfill both of the original conditions for meaningful learning.

Beyond the manipulative stage of learning, communication becomes the goal, and for meaningful learning to continue, the earlier communication begins, the better. Through communication the learner himself is better able to relate his new language to his own cognitive organization. At this stage "grammar" itself is more easily adaptable to deductive explanations and class discussions. The latter often serve as merely a diversionary tactic in which students sometimes try to avoid more pressing concerns; but if discussion of a grammatical point is of interest to the whole class, and students are creatively struggling with the language, then they are indeed learning meaningfully: both conditions are being satisfied.

Since adults are capable of deductive reasoning and abstract formal operational thought, grammatical explanation can also serve a vital purpose--if the grammar itself is real, and the teacher is communicating meaningfully. Here, reference to existing knowledge and

motivating sets is of utmost importance, and students must see purposiveness in explanations.

Above all, if the complexities of the learner and the complexities of human linguistic interaction are well researched, and creatively reflected in all of our grammar lessons, then grammar, if it is psychologically real, can remain as one of the key categories in foreign language teaching today.

REFERENCES

- Ausubel, David. Educational Psychology: A Cognitive View. New York: Holt, Rinehart & Winston, 1968.
- Begin, Yves. Evaluative and Emotional Factors in Learning a Foreign Language. Montreal: Bellarmin, 1971
- Brown, H. Douglas. "Cognitive pruning and second language acquisition." Modern Language Journal (April, 1972), in press.
- Campbell, Russell N. "An evaluation and comparison of present methods for teaching English grammar to speakers of other languages." TESOL Quarterly 4 (March, 1970), 37-48.
- Chomsky, Noam. "Linguistic theory" N.E. Conferences on the Teaching of Foreign Languages. 1966.
- La Forge, Paul. "Community language learning: a pilot study" Language Learning 21 (June, 1971), p. 45-62.
- Lewis, Karen. "Transformational-generative grammar: a new consideration to teaching foreign languages." Modern Language Journal 56 (January, 1972), p. 3-10.
- Nelson, Robert J. and Leon Jakobovits. "Motivation in foreign language learning." N.E. Conference on the Teaching of Foreign Languages. 1970.
- Nilsen, Don L.F. "The use of case grammar in teaching English as a foreign language" TESOL Quarterly 5 (December, 1971), p. 293-300.
- Paulston, Christina Bratt. "The sequencing of structural pattern drills." TESOL Quarterly 5 (September, 1971), 197-208.